

PTO/SB/21 (02-04)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

**TRANSMITTAL
FORM**

(to be used for all correspondence after initial filing)

Application Number	10/716,369
Filing Date	November 18, 2003
First Named Inventor	BANEY et al.
Art Unit	1755
Examiner Name	
Attorney Docket Number	5853-464

Total Number of Pages in This Submission

ENCLOSURES (Check all that apply)

<input type="checkbox"/> Fee Transmittal Form	<input type="checkbox"/> Drawing(s)	<input type="checkbox"/> After Allowance communication to Technology Center (TC)
<input type="checkbox"/> Fee Attached	<input type="checkbox"/> Licensing-related Papers	<input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences
<input type="checkbox"/> Amendment/Reply	<input type="checkbox"/> Petition	<input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief)
<input type="checkbox"/> After Final	<input type="checkbox"/> Petition to Convert to a Provisional Application	<input type="checkbox"/> Proprietary Information
<input type="checkbox"/> Affidavits/declaration(s)	<input type="checkbox"/> Power of Attorney, Revocation	<input type="checkbox"/> Status Letter
<input type="checkbox"/> Extension of Time Request	<input type="checkbox"/> Change of Correspondence Address	<input checked="" type="checkbox"/> Other Enclosure(s) (please identify below):
<input type="checkbox"/> Express Abandonment Request	<input type="checkbox"/> Terminal Disclaimer	PTO/SB/08A&B; 30 References; and 1 Postcard.
<input checked="" type="checkbox"/> Information Disclosure Statement	<input type="checkbox"/> Request for Refund	
<input type="checkbox"/> Certified Copy of Priority Document(s)	<input type="checkbox"/> CD, Number of CD(s) _____	
<input type="checkbox"/> Response to Missing Parts/Incomplete Application	Remarks	
<input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53		

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm or Individual name	Neil R. Jetter AKERMAN SENTERFITT
Signature	
Date	April 21, 2004

CERTIFICATE OF TRANSMISSION/MAILING

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below.

Typed or printed name	Neil R. Jetter		
Signature		Date	April 21, 2004

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re: Application of BANEY et al.

Application No.: 10/716,369

Examiner:

Date Filed: November 18, 2003

Group: 1755

For: PROCESS FOR SIBCN BASED PRECERAMIC POLYMERS
AND PRODUCTS DERIVABLE THEREFROM

CERTIFICATE UNDER 37 CFR 1.8(a)

I hereby certify that this correspondence is being deposited with the U.S. Postal Service as First Class mail in an envelope addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on April 21, 2004.

Neil R. Jetter

Commissioner for Patents
Post Office Box 1450
Alexandria, VA 22313-1450

Date: April 21, 2004

INFORMATION DISCLOSURE STATEMENT

Sir:

Pursuant to the Duty to Disclose under 37 C.F.R. §1.56, Applicants hereby disclose information that may be relevant to the Examiner's consideration of the above-identified application and the patentability of its claims.

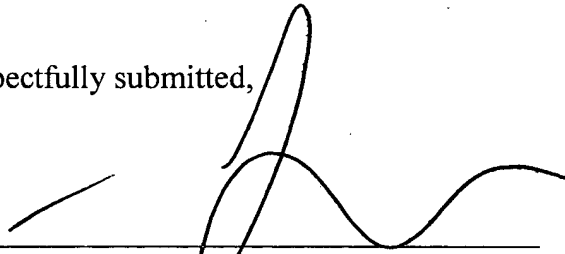
In accordance with Rules 56, 97, and 98 of the Rules of Practice in Patent Cases (37 C.F.R. §§ 1.56, 1.97, and 1.98), Form PTO/SB/08A&B and copies of references cited therein are submitted for consideration by the Examiner. While the references provided in this Information Disclosure Statement may be material to patentability pursuant to 37 C.F.R. § 1.56, it is not intended to constitute an admission that any reference referred to herein is prior art for this invention unless specially designated as such. Also, in accordance with 37 C.F.R. § {WP177028;1}

In re Application of: BANEY et al.
Application No.: 10/716,369
Filed: November 18, 2003
Group Art Unit:
For: PROCESS FOR SIBCN BASED PRECERAMIC POLYMERS
AND PRODUCTS DERIVABLE THEREFROM

1.97(g), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made or that no other material information as defined in 37 C.F.R. § 1.56(a) exists.

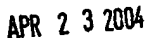
This Information Disclosure Statement is being filed before the issuance of a first office action on the merits of the application (37 C.F.R. 1.97(b)(3)); therefore, no fee is believed to be due. However, if any fee is due, the Commissioner is authorized to charge any such fee and any additional fees due or credit any overpayment to Deposit Account No. 50-0951.

Respectfully submitted,



Neil R. Jetter, Reg. No. 46,803
AKERMAN SENTERFITT
222 Lakeview Avenue, Suite 400
Post Office Box 3188
West Palm Beach, FL 33402-3188
Telephone: (561) 653-5000
Facsimile: (561) 659-6313

Docket No. 5853-464



Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

(Use as many sheets as necessary)

Sheet	1	of	1
-------	---	----	---

Complete if Known

Application Number	10/716,369
Filing Date	November 18, 2003
First Named Inventor	BANEY et al.
Art Unit	1755
Examiner Name	
Attorney Docket Number	5853-464

[illegible][illegible]

Examiner
Signature

Date	
Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)		Complete if Known	
		Application Number	10/716,369
		Filing Date	November 18, 2003
		First Named Inventor	BANEY et al.
		Art Unit	1755
Examiner Name			
Sheet 1	of 3	Attorney Docket Number	5853-464

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		WEINMANN et al., "Boron-containing polysilylcarbodi-imides: a new class of molecular precursors for Si-B-C-N ceramics," Journal of Organometallic Chemistry, 541:345-353, 1997.	
		RIEDEL et al., "A silicoboron carbonitride ceramic stable to 2,000C," Nature, 382:796-798, 1996.	
		WEINMANN et al., "Synthesis and Thermal Behavior of Novel Si-B-C-N Ceramic Precursors," Chem. Mater., 12:623-632, 2000.	
		BILL et al., "Precursor-derived Si-(B-)C-N ceramics: thermolysis, amorphous state and crystallization," Applied Organometallic Chemistry, 15:777-793, 2001.	
		VENKATESWARA et al., "Effect of precursors, methylation agents and solvents on the physicochemical properties of silica aerogels prepared by atmospheric pressure drying method," Journal of Non-Crystalline Solids, 296:165-171, 2001.	
		SCHUHMACHER et al., "Solid-state NMR and FT IR studies of the preparation of Si-B-C-N ceramics from boron-modified polysilazanes," Applied Organometallic Chemistry, 15:809-819, 2001.	
		BANEY et al., "Methylchloropolysilanes and Derivatives Prepared from the Redistribution of Methylchlorosilanes," Organometallics, 2:859-864, 1983.	
		CHOONG et al., "Silicon Carbonitride from Polymeric Precursors: Thermal Cross-Linking and Pyrolysis of Oligosilazane Model Compounds," Chem. Mater., 4:141-146, 1992.	
		FUNAYAMA et al., "Synthesis of a Polyborosilazane and Its Conversion into Inorganic Compounds," J. Am. Ceram. Soc., 76:717-723, 1993.	
		WIDEMAN et al., "Reactions of Monofunctional Boranes with Hydridopolysilazane: Synthesis, Characterization, and Ceramic Conversion Reactions of New Processible Precursors to SiNCB Ceramic Materials," Chem. Mater. 9:2218-2230, 1997.	

Examiner Signature	Date Considered
--------------------	-----------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO:

Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)		Complete if Known	
		Application Number	10/716,369
		Filing Date	November 18, 2003
		First Named Inventor	BANEY et al.
		Art Unit	1755
Examiner Name			
Sheet 2 of 3	Attorney Docket Number 5853-464		

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		GERVAIS et al., "Sol-Gel-Derived Silicon-Boron Oxycarbide Glasses Containing Mixed Silicon Oxycarbide (SiC _x O _{4-x}) and Boron Oxycarbide (BCyO _{3-y}) Units," 84:2160-2164, 2001.	
		LI et al., "Preparation of Si-C-N-Fe magnetic ceramics from iron-containing polysilazane," Applied Organometallic Chemistry, 17:120-126, 2003.	
		WIDEMAN et al., "Boron-modified Polysilycarbodi-imides as Precursors for Si-B-C-N Ceramics: Synthesis, Plastic-forming and High-temperature Behavior," Appl. Organometal. Chem., 12:725-734, 1998.	
		WAN et al., "Effect of Ammonia Treatment on the Crystallization of Amorphous Silicon-Carbon-Nitrogen Ceramics Derived from Polymer Precursor Pyrolysis," J. Am. Ceram. Soc., 85:554-564, 2002.	
		SU et al., "Synthesis, Characterization, and Ceramic Conversion Reactions of Borazine-Modified Hydridopolysilazanes: New Polymeric Precursors to SiNCB Ceramic Composites," Chem. Mater., 5:547-556, 1993.	
		FUNAYAMA et al., "Conversion mechanism of polyborosilazane into silicon nitride-based ceramics," Journal of Materials Science, 30:410-416, 1995.	
		CINIBULK et al., "Characterization of Oxidized Polymer-Derived SiBCN Fibers," J. Am. Ceram. Soc., 84:2197-2202, 2001.	
		MULLER et al., "Short-Range Ordering in Amorphous Si ₃ B ₃ N ₇ As Determined by Multinuclear NMR Spectroscopy," Chem. Mater., 12:2341-2346, 2000.	
		SCHUHMACHER et al., "Solid-state NMR and FT IR studies of the preparation of Si-B-C-N ceramics from boron-modified polysilazanes," Appl. Organometal. Chem., 15:809-819, 2001.	
		WIDEMAN et al., "Synthesis, Characterization, and Ceramic Conversion Reactions of Borazine/Silazane Copolymers: New Polymeric Precursors to SiNCB Ceramics," Chem. Mater., 7:2203-2212, 1995.	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)		Complete if Known	
		Application Number	10/716,369
		Filing Date	November 18, 2003
		First Named Inventor	BANEY et al.
		Art Unit	1755
Examiner Name			
Sheet 3 of 3	Attorney Docket Number	5853-464	

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		JESCHKE et al., "A magnetic resonance study on the structure of amorphous networks in the Si-B-N(-C) system," Journal of Non-Crystalline Solids, 260:216-227, 1999.	
		ADHYARU et al., "Solid-state cross-polarization magic angle spinning 13C and 15N NMR characterization of Sepia melanin, Sepia melanin free acid and Human hair melanin in comparison with several model compounds," Magnetic Resonance in Chemistry, 41:466-474, 2003.	
		BRENDLER et al., "15N CP/MAS NMR as an instrument in structure investigations of organosilicon polymers," Fresenius J. Anal. Chem., 363:185-188, 1999.	
		WANG et al., "Novel Silicon-Boron-Carbon-Nitrogen Materials Thermally Stable up to 2200C," J. Am. Ceram. Soc., 84:2179-2183, 2001.	
		WIDEMAN et al., "Second-Generation Polymeric Precursors for BN and SiNCB Ceramic Materials," Appl. Organometal. Chem., 12:681-693, 1998.	
		TOREKI et al., "POLYMER-DERIVED SILICON CARBIDE FIBERS WITH LOW OXYGEN CONTENT AND IMPROVED THERMOMECHANICAL STABILITY," Composites Science and Technology, 51:145-159, 1994.	
		SRIVASTAVA et al., "Synthesis of Silyborazines and Their Utilization as Precursors to Silicon-Containing Boron Nitride," Eur. J. Inorg. Chem., 855-859, 1998.	
		IWAMOTO et al., "Crystallization Behavior of Amorphous Silicon Carbonitride Ceramics Derived from Organometallic Precursors," J. Am. Ceram. Soc., 84:2170-2178, 2001.	
		JALOWIECKI et al., "Interface characterization of nanosized B-doped Si3N4/SiC ceramics," Composites Part A, 27A:717-721, 1996.	
		HERMANN et al., "Structure and Electronic Transport Properties of Si-(B)-C-N Ceramics," J. Am. Ceram. Soc., 84:2260-2264, 2001.	

Examiner Signature	Date Considered
--------------------	-----------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.